

STATEMENT OF BASIS (AI No. 2590)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0003654 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Omega Protein, Inc.
Cameron Facility
391 Gulf Beach Hwy.
Cameron, LA 70631

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Kelli Hamilton

DATE PREPARED: February 5, 2010

1. PERMIT STATUS**A. Reason For Permit Action:**

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. LPDES permit - LPDES permit effective date: March 1, 2005
LPDES permit expiration date: February 28, 2010
EPA has not retained enforcement authority.

C. Date Application Received: August 4, 2009

2. FACILITY INFORMATION**A. FACILITY TYPE/ACTIVITY - menhaden fish processing facility**

Omega Protein - Cameron Facility is an existing fish processing plant. Production occurs during the menhaden fishing season in Louisiana, which is from April 15th through the end of October.

Raw menhaden fish are pumped from fishing boats into the plant where they are cooked, pressed, centrifuged, and concentrated to produce fish meal and fish oil. The cooked fish are pressed and decanted to remove water and oil from solids. Centrifuges are used to separate water from the oil.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II (BPJ points to 0 as per administrative decision)
3. Wastewater Type: II
4. SIC code: 2077

C. LOCATION - 391 Gulf Beach Hwy. in Cameron, Cameron Parish
Latitude 29°47'8", Longitude 93°20'56"

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3. OUTFALL INFORMATION

Outfall 001

Discharge Type: process wastewater including boiler blowdown, evaporator condensate, washdown water, barometric leg seal water, bailwater, and stormwater

Treatment: None

Location: at the point of discharge to the Calcasieu Ship Channel

Flow: 1.18 MGD

Discharge Route: Calcasieu Ship Channel

Outfall 003

Discharge Type: treated sanitary wastewater

Treatment: sanitary plant with aeration and chlorination

Location: at the point of discharge from the sanitary treatment system

Flow: 3,000 gpd

Discharge Route: Calcasieu Ship Channel

4. RECEIVING WATERS

STREAM - Calcasieu Ship Channel

BASIN AND SEGMENT - Calcasieu River Basin, Segment 030401

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife
e. oyster propagation

5. TMDL STATUS

Subsegment 030401, Calcasieu River-From below Moss Lake to the Gulf of Mexico; includes Ship Channel and Monkey Island Loop (Estuarine), is listed on LDEQ's Final 2006 303(d) list as impaired for fecal coliform. To date, a TMDL has not yet been developed for fecal coliform for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent limitations and requirements as imposed by a future TMDL. However, a fecal coliform limit has been established in accordance with sanitary discharges.

Subsegment 030401 was previously listed as impaired for priority organics for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving waterbodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon

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any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 030401:

The TMDL for Priority Organics was completed May 2002. The TMDL states that there were no permitted discharges of priority organics to the Lower Calcasieu Estuary and Ship Channel, and the two facilities that might discharge priority organics are located well away from the main channel. It stated that there was no evidence that priority organics are causing impairments upstream of this subsegment. It further stated that this subsegment should be delisted for priority organics. Additionally, this facility is not anticipated to discharge priority organics.

6. CHANGES FROM PREVIOUS PERMIT

Limitations for Outfall 001 have increased due to an increase in production. Monthly Average Limitations have been added to Outfall 003. Weekly Average Limitations for Outfall 003 have been changed to Daily Maximum Limitations. The Oil and Grease Limitation has been removed from Outfall 003, since no process wastewater discharges from this Outfall. Monitoring Frequency of Outfall 003 has been increased from 1/month to 2/month.

7. COMPLIANCE HISTORY/COMMENTS

A. Compliance History

No records of recent compliance actions were found.

An inspection was conducted June 19, 2008. EDMS document 37061721.

B. DMR Review/Excursions - A DMR review was completed for October 2007 through September 2009. No DMR for Outfall 003 was submitted in October 2007. No DMRs were submitted in January and February 2008. The following excursions were reported:

<u>DATE</u>	<u>PARAMETER</u>	<u>OUTFALL</u>	<u>REPORTED VALUE</u>		<u>PERMIT LIMITS</u>	
			<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>
3/08	TSS	003	---	46	---	45
3/08	Oil & Grease	003	---	25	---	15
5/08	TSS	003	---	55	---	45
7/08	pH	003	5.5	5.5	6	9

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<u>DATE</u>	<u>PARAMETER</u>	<u>OUTFALL</u>	<u>REPORTED VALUE</u>		<u>PERMIT LIMITS</u>	
			<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>
1/09	TSS	003	---	65	---	45
3/09	TSS	003	---	47	---	45
4/09	TSS	003	---	62	---	45
5/09	TSS	003	---	76	---	45
6/09	TSS	003	---	120	---	45
7/09	TSS	003	---	98	---	45
8/08	TSS	003	---	157	---	45
8/09	pH	001	5.1	8.5	6	9
9/09	TSS	003	---	78	---	45
9/09	Fecal Coliform	003	---	50	14	43

Based on the above review, this facility was referred to the Enforcement Division on February 18, 2010 for further review. Please note that this is a referral only.

8. EXISTING EFFLUENT LIMITS

Outfall 001 - (lbs/day)
 BOD 7382:13250
 TSS 2839:7004
 Oil & Grease 1439:2650
 pH 6-9 s.u.

Outfall 003-
 BOD ---:45 mg/l
 TSS ---:45 mg/l
 Oil & Grease ---:15 mg/l
 Fecal Coliform 14:43 colonies/100ml
 pH 6-9 s.u.

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9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 030401 of the Calcasieu River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated January 5, 2010 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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13. STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 2077 are considered to have storm water discharges associated with industrial activity.

For first time permit issuance, the SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. **For renewal permit issuance**, the SWP3 shall be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility. (see Narrative Requirements for the AI)

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Rationale for Omega Protein, Inc.

1. **Outfall 001** process wastewater including boiler blowdown, evaporator condensate, washdown water, barometric leg seal water, bailwater, and stormwater (estimated flow is 1.18 MGD)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (lb/day)	<u>Reference</u>
Flow MGD	Report:Report	LAC 33:IX.2707.I.1.b
BOD5*	7800:14000	40 CFR 408.152.a
TSS*	3000:7400	40 CFR 408.152.a
Oil and Grease	1520:2800	40 CFR 408.152.a
pH min/max	6.0 - 9.0	40 CFR 408.152.a
s.u.	(min) (max)	

Treatment: none

Monitoring Frequency: weekly when discharging

Limits Justification: Limits are based on the Canned and Preserved Seafood Processing Point Source Category Effluent Limitation Guidelines (ELG), Subpart O - Fish Meal Processing Subcategory, 40 CFR 408.152.a.

Based on the facility's reported 2,000,000 lbs/day of seafood processed (email dated 2/15/10), the ELG-based limits are:

Limitation lbs/day = (seafood processed lbs/day) (ELG lbs/1000 lbs)

BOD5

Monthly Average = (2,000,000 lbs/day) (3.90 lbs/1000 lbs) = 7800 lbs/day

Daily Maximum = (2,000,000 lbs/day) (7.00 lbs/1000 lbs) = 14000 lbs/day

TSS

Monthly Average = (2,000,000 lbs/day) (1.50 lbs/1000 lbs) = 3000 lbs/day

Daily Maximum = (2,000,000 lbs/day) (3.70 lbs/1000 lbs) = 7400 lbs/day

Oil & Grease

Monthly Average = (2,000,000 lbs/day) (0.76 lbs/1000 lbs) = 1520 lbs/day

Daily Maximum = (2,000,000 lbs/day) (1.40 lbs/1000 lbs) = 2800 lbs/day

*The background concentration of BOD and TSS will be allowed in the discharge of Outfall 001 if the effluent is being returned to the same water source from which the intake water was obtained. The permit limit represents the total allowable net discharge for Outfall 001. Net limits are defined as the mass loading in the effluent minus the mass loading in the intake water. Simultaneous sampling of the effluent and the intake water shall be conducted to establish the net value. The sample results of the intake water, the effluent, and the net value shall be reported on the DMR.

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2. Outfall 003 treated sanitary wastewater (estimated flow is 3,000 gpd)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Daily Max (mg/l)	<u>Reference</u>
Flow MGD	Report: Report	LAC 33:IX.2707.I.1.b
BOD5	30:45	Class I Sanitary General Permit
TSS	30:45	Class I Sanitary General Permit
Fecal Coliform col/100ml	14:43	Class I Sanitary General Permit
pH min/max	6.0 - 9.0	Class I Sanitary General Permit

Treatment: sanitary plant with aeration and chlorination

Monitoring Frequency: 2/month. The monitoring frequency has been increased due to violations of the previous permit.

Limits Justification: limitations are based on the previous permit and the Class I Sanitary Discharge General Permit, LAG530000.

The fecal coliform limitation is based on the Class I Sanitary Discharge General Permit, LAG530000, and also on LAC 33IX.1113.C.5.d., which requires more stringent fecal coliform limits if oyster propagation is a designated use of the receiving stream.

BPJ Best Professional Judgement
su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.